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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,692	02/04/2004	Bruce C. Polzin	066241-0111	5118

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EXAMINER
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KYLE, MICHAEL J

ART UNIT	PAPER NUMBER
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3677

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,692	<b>Applicant(s)</b> POLZIN ET AL.	
	<b>Examiner</b> Michael J. Kyle	<b>Art Unit</b> 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 requires an overmold composed of “an elastomeric material and a foaming agent”. The claim later recites that the micro-cellular layer is “composed of the elastomeric material and micro-cellular bubbles created by the foaming agent”. It is unclear if the foaming agent is present in all layers, or just the first and second layers. Further, from the claim language, it is unclear if the foaming agent is initially present, then dissipated as the micro-cellular bubbles are formed, or if the foaming agent is present in the end product. For the purpose of this examination, any prior art with foaming agent in the end product, or used in the manufacturing thereof, will be considered to meet the limitation of the overmold composed of a foaming agent.
3. Claim 3 requires the first, second, and foam layers to be integrally molded with each other by injection molding of a resin. It is unclear to which element the resin refers.
4. Claims 2-11 ultimately depend from rejected claim 1 and include all the limitations thereof. For this reason, these claims are also rejected.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rechelbacher (U.S. Patent No. 6,647,582) in view of Moore et al ("Moore", U.S. Patent No. 3,977,054). Rechelbacher discloses a cushioning and vibration dampening apparatus comprising an overmold (30). The overmold is composed of an elastomeric material (38, 46) and a gel or putty like substance (32). The overmold comprises first (46) and second (38) layers and in conjunction, enveloping a third gel or putty like layer. Rechelbacher discloses the layer enveloped by the first and second layers to be a gel or putty like material, but does not specifically disclose the third layer to be composed of elastomeric material and micro-cellular bubbles created by the foaming agent.

7. Moore teaches a cushion grip with three layers (see figure 6), including first and second elastomeric layers (elastomeric portion at top of figure 6, elastomeric portion at bottom of figure 6) enveloping a third layer (28 or 32') that is a pad composed of an elastomeric material and microcellular bubbles ("vinyl, rubber or polyurethane foam"; column 4, lines 32-37). Merriam-Webster's Collegiate Dictionary 10<sup>th</sup> Edition defines "foam" as "a material in a lightweight cellular form resulting from introduction of gas bubbles during manufacture". Thus, the foam of Moore includes bubbles. The prefix "micro" refers to being small or minute, which are both

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terms of degree. The cellular bubbles of Moore are considered to be small or minute; and thus “micro-cellular”. Moore’s arrangement provides a desirable soft, resilient, feel when engaged by a user’s hand. One of ordinary skill would also recognize the foam material as an equivalent alternative to Rechelbacher’s gel or putty to provide a grip the temporarily conforms to a user’s hand. Additionally, it is asserted that the foaming agent must have been present in the foam of Moore to create the bubbles of Moore’s foam.

8. Alternatively, Official Notice is taken that foam materials are created from the reaction involving a foaming agent. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Rechelbacher to include a foam with a micro-cellular bubbles, formed by a foaming agent as shown by Moore, in order to provide a comfortable resilient grip that temporarily conforms to a user’s hand grip.

9. With respect to claim 3, it is noted that the claim recites a method limitation (“injection molding”) in an article or apparatus claim. This method limitation is given little patentable weight. Rechelbacher’s three layers can be integrally molded with each other by injection molding of resin. Examiner notes that in a product-by-process claim such as these claims, the prior art must only be capable of being made by the claimed process, as long the as the final product meets the structural limitations of the claim. See MPEP 2113. It is further noted that rubber material disclosed by Rechelbacher is considered to be a resin. Gager et al (U.S. Patent No. 5,624,061) is cited as evidence of this, where it is stated that a grip can be “made from natural or synthetic rubber or other resin” (column 2, lines 44-45)

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10. With respect to claim 4, Rechelbacher discloses a substrate member (18) coupled to the overmold member (30).

11. With respect to claims 5 and 6, the combination of Rechelbacher and Moore disclose overmold can be mechanically attached (via 42 and 44 of Rechelbacher) or bonded to the substrate member. Examiner considers the grip of Rechelbacher to be bonded to the substrate because it is fixedly attached to the substrate. Merriam-Webster's Collegiate Dictionary, Tenth Edition, defines "bond" as "something that binds or restrains". Because the overmold is bound or restrained on the substrate, it is considered to be "bonded" as claimed.

12. With respect to claim 7, Rechelbacher discloses the substrate member to be wood.

13. With respect to claim 8, while Moore appears to show the thickness of the foam layer (28 or 32') to exceed the thickness of the first and second layers (in figure 6), the combination of Rechelbacher and Moore fails to explicitly disclose the thickness of the third layer to exceed the combined thickness of the first and second layers. However, such a modification does not appear to bring about a new or unexpected result. One having ordinary skill in the art would recognize that changing the relative thickness of the layers on a known structure will affect the flexibility of the overmold member, but will still provide the cushioning and vibration dampening functions. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Rechelbacher and Moore such that the thickness of the foam layer exceeds the combined thickness of the non-foam layers, as such a modification does not produce a new or unexpected result.

14. With respect to claim 9, while Rechelbacher appears to show the thickness of the first and second layers to exceed the thickness of the foam layer (in figure 5), the combination of

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Rechelbacher and Moore fails to explicitly disclose the relative thicknesses of the layers to be so configured. However, such a modification does not appear to bring about a new or unexpected result. One having ordinary skill in the art would recognize that changing the relative thickness of the layers on a known structure will affect the flexibility of the overmold member, but will still provide the cushioning and vibration dampening functions. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Rechelbacher and Moore such that the thickness of the first and second layers exceeds the thickness of the third layer, as such a modification does not produce a new or unexpected result.

15. With respect to claim 10, the combination of Rechelbacher and Moore fails to explicitly disclose the combined thickness of the first and second layers to be equal to the thickness of the foam layer. However, such a modification does not appear to bring about a new or unexpected result. One having ordinary skill in the art would recognize that changing the relative thickness of the foam and non-foam layers on a known structure will affect the flexibility of the overmold member, but will still provide the cushioning and vibration dampening functions. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Rechelbacher and Moore such that the thickness of the foam layer is equal to the combined thickness of the non-foam layers, as such a modification does not produce a new or unexpected result.

16. With respect to claim 11, Rechelbacher discloses the overmold to be configured in a predetermined shape.

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17. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rechelbacher in view of Moore as applied to claim 1 above, and further in view of Watarai (U.S. Patent No. 5,848,555). Rechelbacher discloses the elastomeric material to be rubber or plastic. While examiner considers the rubber of Rechelbacher to be a thermoplastic rubber as claimed, examiner further relies on the teachings of Watarai to further show equivalents between rubber and the claimed materials.

18. Watarai teaches a grip portion (4) made from rubber or polyvinyl chloride ("PVC", column 1, line 66). Thus, these two materials are equivalent and interchangeable within the art, as either material may be used to accomplish the same function. It would have been obvious to one having ordinary skill in the art at the time of the invention to make the elastomeric material of either rubber or PVC, as these materials are equivalent in the art.

### ***Response to Arguments***

19. Applicant's arguments filed April 9, 2007 have been fully considered but they are not persuasive. Applicant argues that Rechelbacher discloses two different types of materials comprising his grip, where in the instant application, the material is the same. Examiner notes that the claim does not clearly provide this feature of the present invention. Examiner has set forth a rejection under section 112 2<sup>nd</sup> paragraph for this reason. As presented, the combination of Rechelbacher and Moore reads on the claim.

### ***Conclusion***



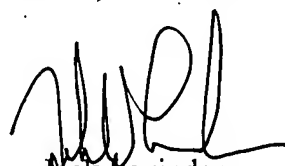
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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mk



Jack Lavinder  
Primary Examiner  
Art Unit 3677